UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
Environmental Sciences Center
701 Mapes Road
Fort Meade, Maryland 20755-5350

DATE : February 22, 2012

SUBJECT: Region III Data QA Review

FROM: Colleen Walling
Region III ESAT RPO (3EA20)

TO: Rich Fetzer
Remedial Project Manager (3HS31)

Attached is the organic data validation report for the Dimock Residential Groundwater site (Case #: 480-15770-1) completed by the Region III Environmental Services Assistance Team (ESAT) contractor under the direction of Region III EAID.

If you have any questions regarding this review, please call me at (410) 305-2763.

Attachment

TO: #0042 TDF: #02096 Data Validation
TO: #0042 TDF: 02085 Sample Log-in Processing

cc: Gene Nance (Techlaw)
Suddha Graves (Techlaw)

DIM0199447

Lockheed Martin IS&GS – Civil
Energy & Environment
ESAT Region 3
US EPA Environmental Science Center
701 Mapes Road Ft. Meade, MD 20755-5350
Telephone 410-305-3037 Facsimile 410-305-3597

LOCKHEED MARTIN
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Date: February 22, 2012

Subject: Organic Data Validation (M3 Level)
Case: R33917
Project: 480-15770-1
Site: Dimock

From: Ex. 4 - CBI
Organic Data Reviewer

Ex. 4 - CBI
Senior Oversight Chemist

To: Colleen Walling
ESAT Region 3 Project Officer

OVERVIEW

Third party Case R33917, Project 480-15770-1, consisted of twenty (20) aqueous samples including five (5) field blanks and one (1) rinsate blank analyzed for ethylene glycol, diethylene glycol, triethylene glycol, 2-methoxyethanol and 2-ethoxyethanol. Samples were analyzed by TestAmerica Buffalo (TAL BUF) according to Test Methods for Evaluating Solid Waste SW-846 Method 8015B.

SUMMARY

Data were validated according to Region 3 Modifications to the National Functional Guidelines for Organic Data Review, Level M3 and is assigned the Superfund Data Validation Label S4VM (Stage_4_Validation_Manual). Areas of concern with respect to data usability are listed below.

MINOR PROBLEMS

- Several compounds failed precision criteria [Percent Difference (%D)] (>15%) in continuing calibrations per Method 8015B. Positive results for triethylene glycol and diethylene glycol were impacted and were qualified "J" unless superseded by "B" on the DSFs. Quantitation limits were not impacted since the %D did not exceed the 50% criteria.

DATA SUMMARY FORM: Volatiles

Case #: R33917 Project : 480-15770-1
Site : DIMOCK Number of Water Samples : 20
Lab. : TAL BUF

Sample Number :		HW02		EB01		FB02		FB03		FB04	
Sampling Location :		HW02		EB01		FB02		FB03		FB04	
Laboratory ID :		480-15770-1		480-15770-2		480-15770-3		480-15770-4		480-15770-5	
Field QC :				Equipment Blank		Field Blank		Field Blank		Field Blank	
Matrix :		Water		Water		Water		Water		Water	
Units :		mg/L		mg/L		mg/L		mg/L		mg/L	
Date Sampled :		01/25/2012		01/28/2012		01/24/2012		01/25/2012		01/26/2012	
Time Sampled :		12:58		11:26		12:11		10:01		09:13	
Dilution Factor :		1.0		1.0		1.0		1.0		1.0	
Volatile Compound	RL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Ethylene glycol	10		UL				UL		UL		
Triethylene glycol	10		UL				UL	1.7	J		
Diethylene glycol	10	0.64	B	0.55	J	0.53	J	0.56	J	0.59	J
2-Methoxyethanol	10		UL				UL		UL		
2-Ethoxyethanol	10		UL				UL		UL		

Sample Number :		FB05		FB06		HW01		HW02z		HW04	
Sampling Location :		FB05		FB06		HW01		HW02z		HW04	
Laboratory ID :		480-15770-6		480-15770-7		480-15770-8		480-15770-9		480-15770-10	
Field QC :		Field Blank		Field Blank							
Matrix :		Water		Water		Water		Water		Water	
Units :		mg/L		mg/L		mg/L		mg/L		mg/L	
Date Sampled :		01/27/2012		01/30/2012		01/25/2012		01/25/2012		01/24/2012	
Time Sampled :		09:40		09:30		16:31		12:59		14:33	
Dilution Factor :		1.0		1.0		1.0		1.0		1.0	
Volatile Compound	RL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Ethylene glycol	10						UL		UL		UL
Triethylene glycol	10						UL		UL		UL
Diethylene glycol	10	0.56	J	0.56	J	0.56	B	0.54	B	0.52	B
2-Methoxyethanol	10						UL		UL		UL
2-Ethoxyethanol	10						UL		UL		UL

RL = Reporting Limit SEE NARRATIVE FOR CODE DEFINITIONS
To calculate sample quantitation limits: (RL * Dilution Factor) Revised 09/99

Case #: R33917 Project : 480-15770-1
Site : DIMOCK
Lab. : TAL BUF

Sample Number :	HW05		HW06		HW08a		HW12		HW13	
Sampling Location :	HW05		HW06		HW08a		HW12		HW13	
Laboratory ID :	480-15770-11		480-15770-12		480-15770-13		480-15770-14		480-15770-15	
Matrix :	Water		Water		Water		Water		Water	
Units :	mg/L		mg/L		mg/L		mg/L		mg/L	
Date Sampled :	01/26/2012		01/26/2012		01/25/2012		01/26/2012		01/30/2012	
Time Sampled :	11:35		15:30		11:46		13:23		11:23	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Volatile Compound	RL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Ethylene glycol	10						UL				
Triethylene glycol	10	2.2	J			3.0	B				
Diethylene glycol	10	0.68	B				UL			0.57	B
2-Methoxyethanol	10						UL				
2-Ethoxyethanol	10						UL				

Sample Number :	HW14		HW14-P		HW17		HW24		HW24-P	
Sampling Location :	HW14		HW14		HW17		HW24		HW24	
Laboratory ID :	480-15770-16		480-15770-17		480-15770-18		480-15770-19		480-15770-20	
Matrix :	Water		Water		Water		Water		Water	
Units :	mg/L		mg/L		mg/L		mg/L		mg/L	
Date Sampled :	01/26/2012		01/26/2012		01/27/2012		01/27/2012		01/27/2012	
Time Sampled :	17:13		19:15		11:40		12:09		13:18	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Volatile Compound	RL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Ethylene glycol	10										
Triethylene glycol	10										
Diethylene glycol	10	0.59	B	0.56	B	0.54	B	0.57	B	0.56	B
2-Methoxyethanol	10										
2-Ethoxyethanol	10										

RL = Reporting Limit SEE NARRATIVE FOR CODE DEFINITIONS
To calculate sample quantitation limits: (RL * Dilution Factor) Revised 09/99

Appendix B
Data Summary Forms

GLOSSARY OF DATA QUALIFIER CODES (ORGANIC)

CODES RELATED TO IDENTIFICATION

(confidence concerning presence or absence of compounds)

U = Not detected. The associated number indicates approximate sample concentration necessary to be detected.

NO CODE = Confirmed identification.

B = Not detected substantially above the level reported in laboratory or field blanks.

R = Unusable result. Analyte may or may not be present in the sample. Supporting data necessary to confirm result.

N = Tentative identification. Consider present. Special methods may be needed to confirm its presence or absence in future sampling efforts.

CODES RELATED TO QUANTITATION

(can be used for both positive results and sample quantitation limits):

J = Analyte present. Reported value may not be accurate or precise.

K = Analyte present. Reported value may be biased high. Actual value is expected to be lower.

L = Analyte present. Reported value may be biased low. Actual value is expected to be higher.

UJ = Not detected, quantitation limit may be inaccurate or imprecise.

UL = Not detected, quantitation limit is probably higher.

OTHER CODES

NJ = Qualitative identification questionable due to poor resolution. Presumptively present at approximate quantity.

Q = No analytical result.

ATTACHMENTS

Appendix A – Glossary of Data Qualifier Codes
Appendix B – Data Summary Form(s)
Appendix C – Chain of Custody Records
Appendix D – Laboratory Case Narrative

DCN: R33917_480-15770-1

USEPA CLP Generic COC (LAB COPY)
DateShipped: 1/31/2012
CarrierName: FedEx
AirbillNo: 7980 0605 7668

CHAIN OF CUSTODY RECORD

Project Code: TL01-11-12-001

No: 3-013112-075824-0031
Lab: Test America DIM
Lab Contact:
Lab Phone: 716.504.9822

Sample #	Matrix/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	For Lab Use Only
HW02	Drinking Water/ Mike Ferrier	Grab	17GLY(7), 17GLY(7)	1220 (-NA- / 40mlGlassVial), 2078 (-NA- / 40mlGlassVial) (2)	HW02	01/25/2012 12:58	
EB01	Aqueous/ Tom Sedlacek	Grab	17GLY(7), 17GLY(7)	886 (-NA- / 40mlGlassVial), 887 (-NA- / 40mlGlassVial) (2)	EB01	01/28/2012 11:26	
FB02	Aqueous/ Tom Sedlacek	Grab	17GLY(7), 17GLY(7)	1355 (-NA- / 40mlGlassVial), 1356 (-NA- / 40mlGlassVial) (2)	FB02	01/24/2012 12:11	
FB03	Aqueous/ Joel Munson	Grab	17GLY(7), 17GLY(7)	1357 (-NA- / 40mlGlassVial), 1358 (-NA- / 40mlGlassVial) (2)	FB03	01/25/2012 10:01	
FB04	Aqueous/ Joel Munson	Grab	17GLY(7), 17GLY(7)	1375 (-NA- / 40mlGlassVial), 1376 (-NA- / 40mlGlassVial) (2)	FB04	01/26/2012 09:13	
FB05	Aqueous/ Joel Munson	Grab	17GLY(7), 17GLY(7)	1387 (-NA- / 40mlGlassVial), 1388 (-NA- / 40mlGlassVial) (2)	FB05	01/27/2012 09:40	
FB06	Aqueous/ Dan Jacobsen	Grab	17GLY(7), 17GLY(7)	1132 (-NA- / 40mlGlassVial), 1133 (-NA- / 40mlGlassVial) (2)	FB06	01/30/2012 09:30	
HW01	Drinking Water/ Bryan Berna	Grab	17GLY(7), 17GLY(7)	1369 (-NA- / 40mlGlassVial), 1370 (-NA- / 40mlGlassVial) (2)	HW01	01/25/2012 16:31	

Special Instructions:

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: 17GLY=17-Glycol

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
No	JAllenbein	01/31/12		2-1-12	730						

5.1 #3

USEPA CLP Generic COC (LAB COPY)
DateShipped: 1/31/2012
CarrierName: FedEx
AirbillNo: 7980 0605 7668

CHAIN OF CUSTODY RECORD

Project Code: TL01-11-12-001

No: 3-013112-075824-0031
Lab: Test America DIM
Lab Contact:
Lab Phone: 716.504.9822

Sample #	Matrix/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	For Lab Use Only
HW02z	Drinking Water/ Mike Ferrier	Grab	17GLY(7), 17GLY(7)	1366 (-NA- / 40mlGlassVial), 1367 (-NA- / 40mlGlassVial) (2)	HW02z	01/25/2012 12:59	
HW04	Drinking Water/ Mike Ferrier	Grab	17GLY(7)	2095 (-NA- / 40mlGlassVial) (1)	HW04	01/24/2012 14:33	
HW05	Drinking Water/ Tom Sedlacek	Grab	17GLY(7), 17GLY(7)	1377 (-NA- / 40mlGlassVial), 1378 (-NA- / 40mlGlassVial) (2)	HW05	01/26/2012 11:35	
HW06	Drinking Water/ Bryan Berna	Grab	17GLY(7), 17GLY(7)	1379 (-NA- / 40mlGlassVial), 1380 (-NA- / 40mlGlassVial) (2)	HW06	01/26/2012 15:30	
HW08a	Drinking Water/ Bryan Berna	Grab	17GLY(7)	1363 (-NA- / 40mlGlassVial) (1)	HW08a	01/25/2012 11:46	
HW12	Drinking Water/ Mike Ferrier	Grab	17GLY(7), 17GLY(7)	1372 (-NA- / 40mlGlassVial), 1373 (-NA- / 40mlGlassVial) (2)	HW12	01/26/2012 13:23	
HW13	Drinking Water/ Bryan Berna	Grab	17GLY(7), 17GLY(7)	1168 (-NA- / 40mlGlassVial), 1169 (-NA- / 40mlGlassVial) (2)	HW13	01/30/2012 11:23	
HW14	Drinking Water/ Mike Ferrier	Grab	17GLY(7), 17GLY(7)	1381 (-NA- / 40mlGlassVial), 1382 (-NA- / 40mlGlassVial) (2)	HW14	01/26/2012 17:13	

Special Instructions:

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: 17GLY=17-Glycol

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
14		01/31/12		2-1-12	730						

Appendix D
Laboratory Case Narrative

Comments
No additional comments.

Receipt
All samples were received in good condition within temperature requirements.

GC VOA
Method 8015B: The percent difference in the associated continuing calibration verification (CCV 480-50111/36) for several analytes exceeded 20% on the ZB-5 column, indicating a high bias. The associated samples are non-detect for these analytes, the data is unaffected.

No other analytical or quality issues were noted.

METHOD SUMMARY

Client: Techlaw, Inc

Job Number: 480-15570-1

Description	Lab Location	Method	Preparation Method
Matrix Water			
Glycols -Direct Injection (GC/FID)	TAL BUF	SW846 8015B	
8015 Direct Injection Prep (Aqueous)			SW846 8015 Prep

Lab References:

TAL BUF = TestAmerica Buffalo

Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Attachment 2

Appendix A
Form Is

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-15570-1

SDG No.:

Client Sample ID: HW02 Lab Sample ID: 480-15570-1

Matrix: Water Lab File ID: PE08229.d

Analysis Method: 8015B Date Collected: 01/25/2012 12:58

Sample wt/vol: 0.5(mL) Date Analyzed: 02/02/2012 10:42

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-5 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 50111 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
107-21-1	Ethylene glycol	ND		10	0.76
112-27-6	Triethylene Glycol	ND		10	1.6
111-46-6	Diethylene glycol	0.64	J	10	0.51
109-86-4	2-Methoxyethanol	ND		10	0.76
110-80-5	2-Ethoxyethanol	ND		10	0.94

CAS NO.	SURROGATE	%REC	Q	LIMITS
110-63-4	1,4-Butanediol	106		66-130

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-15570-1

SDG No.:

Client Sample ID: EB01 | Lab Sample ID: 480-15570-2

Matrix: Water | Lab File ID: PE08230.d

Analysis Method: 8015B | Date Collected: 01/28/2012 11:26

Sample wt/vol: 0.5(mL) | Date Analyzed: 02/02/2012 11:00

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-5 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 50111 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
107-21-1	Ethylene glycol	ND		10	0.76
112-27-6	Triethylene Glycol	ND		10	1.6
111-46-6	Diethylene glycol	0.55	J	10	0.51
109-86-4	2-Methoxyethanol	ND		10	0.76
110-80-5	2-Ethoxyethanol	ND		10	0.94

CAS NO.	SURROGATE	%REC	Q	LIMITS
110-63-4	1,4-Butanediol	106		66-130

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-15570-1

SDG No.:

Client Sample ID: FB02 Lab Sample ID: 480-15570-3

Matrix: Water Lab File ID: PE08231.d

Analysis Method: 8015B Date Collected: 01/24/2012 12:11

Sample wt/vol: 0.5(mL) Date Analyzed: 02/02/2012 11:17

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-5 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 50111 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
107-21-1	Ethylene glycol	ND		10	0.76
112-27-6	Triethylene Glycol	ND		10	1.6
111-46-6	Diethylene glycol	0.53	J	10	0.51
109-86-4	2-Methoxyethanol	ND		10	0.76
110-80-5	2-Ethoxyethanol	ND		10	0.94

CAS NO.	SURROGATE	%REC	Q	LIMITS
110-63-4	1,4-Butanediol	103		66-130

FORM I

GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-15570-1

SDG No.:

Client Sample ID: FB03 Lab Sample ID: 480-15570-4

Matrix: Water Lab File ID: PE08233.d

Analysis Method: 8015B Date Collected: 01/25/2012 10:01

Sample wt/vol: 0.5(mL) Date Analyzed: 02/02/2012 12:08

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-5 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 50111 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
107-21-1	Ethylene glycol	ND		10	0.76
112-27-6	Triethylene Glycol	1.7	J	10	1.6
111-46-6	Diethylene glycol	0.56	J	10	0.51
109-86-4	2-Methoxyethanol	ND		10	0.76
110-80-5	2-Ethoxyethanol	ND		10	0.94

CAS NO.	SURROGATE	%REC	Q	LIMITS
110-63-4	1,4-Butanediol	104		66-130

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-15570-1

SDG No.:

Client Sample ID: FB04 Lab Sample ID: 480-15570-5

Matrix: Water Lab File ID: PE08234.d

Analysis Method: 8015B Date Collected: 01/26/2012 09:13

Sample wt/vol: 0.5(mL) Date Analyzed: 02/02/2012 12:25

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-5 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 50111 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
107-21-1	Ethylene glycol	ND		10	0.76
112-27-6	Triethylene Glycol	ND		10	1.6
111-46-6	Diethylene glycol	0.59	J	10	0.51
109-86-4	2-Methoxyethanol	ND		10	0.76
110-80-5	2-Ethoxyethanol	ND		10	0.94

CAS NO.	SURROGATE	%REC	Q	LIMITS
110-63-4	1,4-Butanediol	106		66-130

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-15570-1

SDG No.:

Client Sample ID: FB05 | Lab Sample ID: 480-15570-6

Matrix: Water | Lab File ID: PE08235.d

Analysis Method: 8015B | Date Collected: 01/27/2012 09:40

Sample wt/vol: 0.5(mL) | Date Analyzed: 02/02/2012 12:43

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-5 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 50111 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
107-21-1	Ethylene glycol	ND		10	0.76
112-27-6	Triethylene Glycol	ND		10	1.6
111-46-6	Diethylene glycol	0.56	J	10	0.51
109-86-4	2-Methoxyethanol	ND		10	0.76
110-80-5	2-Ethoxyethanol	ND		10	0.94

CAS NO.	SURROGATE	%REC	Q	LIMITS
110-63-4	1,4-Butanediol	108		66-130

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-15570-1

SDG No.:

Client Sample ID: FB06 Lab Sample ID: 480-15570-7

Matrix: Water Lab File ID: PE08236.d

Analysis Method: 8015B Date Collected: 01/30/2012 09:30

Sample wt/vol: 0.5(mL) Date Analyzed: 02/02/2012 13:00

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-5 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 50111 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
107-21-1	Ethylene glycol	ND		10	0.76
112-27-6	Triethylene Glycol	ND		10	1.6
111-46-6	Diethylene glycol	0.56	J	10	0.51
109-86-4	2-Methoxyethanol	ND		10	0.76
110-80-5	2-Ethoxyethanol	ND		10	0.94

CAS NO.	SURROGATE	%REC	Q	LIMITS
110-63-4	1,4-Butanediol	105		66-130

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-15570-1

SDG No.:

Client Sample ID: HW01 Lab Sample ID: 480-15570-8

Matrix: Water Lab File ID: PE08237.d

Analysis Method: 8015B Date Collected: 01/25/2012 16:31

Sample wt/vol: 0.5(mL) Date Analyzed: 02/02/2012 13:17

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-5 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 50111 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
107-21-1	Ethylene glycol	ND		10	0.76
112-27-6	Triethylene Glycol	ND		10	1.6
111-46-6	Diethylene glycol	0.56	J	10	0.51
109-86-4	2-Methoxyethanol	ND		10	0.76
110-80-5	2-Ethoxyethanol	ND		10	0.94

CAS NO.	SURROGATE	%REC	Q	LIMITS
110-63-4	1,4-Butanediol	103		66-130

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-15570-1

SDG No.:

Client Sample ID: HW02Z Lab Sample ID: 480-15570-9

Matrix: Water Lab File ID: PE08238.d

Analysis Method: 8015B Date Collected: 01/25/2012 12:59

Sample wt/vol: 0.5(mL) Date Analyzed: 02/02/2012 13:35

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-5 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 50111 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
107-21-1	Ethylene glycol	ND		10	0.76
112-27-6	Triethylene Glycol	ND		10	1.6
111-46-6	Diethylene glycol	0.54	J	10	0.51
109-86-4	2-Methoxyethanol	ND		10	0.76
110-80-5	2-Ethoxyethanol	ND		10	0.94

CAS NO.	SURROGATE	%REC	Q	LIMITS
110-63-4	1,4-Butanediol	100		66-130

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-15570-1

SDG No.:

Client Sample ID: HW04 Lab Sample ID: 480-15570-10

Matrix: Water Lab File ID: PE08239.d

Analysis Method: 8015B Date Collected: 01/24/2012 14:33

Sample wt/vol: 0.5(mL) Date Analyzed: 02/02/2012 13:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-5 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 50111 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
107-21-1	Ethylene glycol	ND		10	0.76
112-27-6	Triethylene Glycol	ND		10	1.6
111-46-6	Diethylene glycol	0.52	J	10	0.51
109-86-4	2-Methoxyethanol	ND		10	0.76
110-80-5	2-Ethoxyethanol	ND		10	0.94

CAS NO.	SURROGATE	%REC	Q	LIMITS
110-63-4	1,4-Butanediol	99		66-130

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-15570-1

SDG No.:

Client Sample ID: HW05 Lab Sample ID: 480-15570-11

Matrix: Water Lab File ID: PE08247.d

Analysis Method: 8015B Date Collected: 01/26/2012 11:35

Sample wt/vol: 0.5(mL) Date Analyzed: 02/02/2012 16:44

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-5 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 50111 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
107-21-1	Ethylene glycol	ND		10	0.76
112-27-6	Triethylene Glycol	2.2	J	10	1.6
111-46-6	Diethylene glycol	0.68	J	10	0.51
109-86-4	2-Methoxyethanol	ND		10	0.76
110-80-5	2-Ethoxyethanol	ND		10	0.94

CAS NO.	SURROGATE	%REC	Q	LIMITS
110-63-4	1,4-Butanediol	102		66-130

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-15570-1

SDG No.:

Client Sample ID: HW06 | Lab Sample ID: 480-15570-12

Matrix: Water | Lab File ID: PE08248.d

Analysis Method: 8015B | Date Collected: 01/26/2012 15:30

Sample wt/vol: 0.5(mL) | Date Analyzed: 02/02/2012 17:02

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-5 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 50111 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
107-21-1	Ethylene glycol	ND		10	0.76
112-27-6	Triethylene Glycol	ND		10	1.6
111-46-6	Diethylene glycol	ND		10	0.51
109-86-4	2-Methoxyethanol	ND		10	0.76
110-80-5	2-Ethoxyethanol	ND		10	0.94

CAS NO.	SURROGATE	%REC	Q	LIMITS
110-63-4	1,4-Butanediol	105		66-130

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-15570-1

SDG No.:

Client Sample ID: HW08A Lab Sample ID: 480-15570-13

Matrix: Water Lab File ID: PE08250.d

Analysis Method: 8015B Date Collected: 01/25/2012 11:46

Sample wt/vol: 0.5(mL) Date Analyzed: 02/02/2012 17:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-5 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 50111 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
107-21-1	Ethylene glycol	ND		10	0.76
112-27-6	Triethylene Glycol	3.0	J	10	1.6
111-46-6	Diethylene glycol	ND		10	0.51
109-86-4	2-Methoxyethanol	ND		10	0.76
110-80-5	2-Ethoxyethanol	ND		10	0.94

CAS NO.	SURROGATE	%REC	Q	LIMITS
110-63-4	1,4-Butanediol	101		66-130

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-15570-1

SDG No.:

Client Sample ID: HW12 | Lab Sample ID: 480-15570-14

Matrix: Water | Lab File ID: PE08251.d

Analysis Method: 8015B | Date Collected: 01/26/2012 13:23

Sample wt/vol: 0.5(mL) | Date Analyzed: 02/02/2012 17:53

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-5 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 50111 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
107-21-1	Ethylene glycol	ND		10	0.76
112-27-6	Triethylene Glycol	ND		10	1.6
111-46-6	Diethylene glycol	ND		10	0.51
109-86-4	2-Methoxyethanol	ND		10	0.76
110-80-5	2-Ethoxyethanol	ND		10	0.94

CAS NO.	SURROGATE	%REC	Q	LIMITS
110-63-4	1,4-Butanediol	100		66-130

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-15570-1

SDG No.:

Client Sample ID: HW13 | Lab Sample ID: 480-15570-15

Matrix: Water | Lab File ID: PE08252.d

Analysis Method: 8015B | Date Collected: 01/30/2012 11:23

Sample wt/vol: 0.5(mL) | Date Analyzed: 02/02/2012 18:11

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-5 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 50111 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
107-21-1	Ethylene glycol	ND		10	0.76
112-27-6	Triethylene Glycol	ND		10	1.6
111-46-6	Diethylene glycol	0.57	J	10	0.51
109-86-4	2-Methoxyethanol	ND		10	0.76
110-80-5	2-Ethoxyethanol	ND		10	0.94

CAS NO.	SURROGATE	%REC	Q	LIMITS
110-63-4	1,4-Butanediol	100		66-130

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-15570-1

SDG No.:

Client Sample ID: HW14 | Lab Sample ID: 480-15570-16

Matrix: Water | Lab File ID: PE08253.d

Analysis Method: 8015B | Date Collected: 01/26/2012 17:13

Sample wt/vol: 0.5(mL) | Date Analyzed: 02/02/2012 18:28

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-5 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 50111 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
107-21-1	Ethylene glycol	ND		10	0.76
112-27-6	Triethylene Glycol	ND		10	1.6
111-46-6	Diethylene glycol	0.59	J	10	0.51
109-86-4	2-Methoxyethanol	ND		10	0.76
110-80-5	2-Ethoxyethanol	ND		10	0.94

CAS NO.	SURROGATE	%REC	Q	LIMITS
110-63-4	1,4-Butanediol	103		66-130

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-15570-1

SDG No.:

Client Sample ID: HW14-P Lab Sample ID: 480-15570-17

Matrix: Water Lab File ID: PE08254.d

Analysis Method: 8015B Date Collected: 01/26/2012 19:15

Sample wt/vol: 0.5(mL) Date Analyzed: 02/02/2012 18:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-5 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 50111 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
107-21-1	Ethylene glycol	ND		10	0.76
112-27-6	Triethylene Glycol	ND		10	1.6
111-46-6	Diethylene glycol	0.56	J	10	0.51
109-86-4	2-Methoxyethanol	ND		10	0.76
110-80-5	2-Ethoxyethanol	ND		10	0.94

CAS NO.	SURROGATE	%REC	Q	LIMITS
110-63-4	1,4-Butanediol	102		66-130

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-15570-1

SDG No.:

Client Sample ID: HW17 | Lab Sample ID: 480-15570-18

Matrix: Water | Lab File ID: PE08255.d

Analysis Method: 8015B | Date Collected: 01/27/2012 11:40

Sample wt/vol: 0.5(mL) | Date Analyzed: 02/02/2012 19:03

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-5 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 50111 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
107-21-1	Ethylene glycol	ND		10	0.76
112-27-6	Triethylene Glycol	ND		10	1.6
111-46-6	Diethylene glycol	0.54	J	10	0.51
109-86-4	2-Methoxyethanol	ND		10	0.76
110-80-5	2-Ethoxyethanol	ND		10	0.94

CAS NO.	SURROGATE	%REC	Q	LIMITS
110-63-4	1,4-Butanediol	102		66-130

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-15570-1

SDG No.:

Client Sample ID: HW24 | Lab Sample ID: 480-15570-19

Matrix: Water | Lab File ID: PE08256.d

Analysis Method: 8015B | Date Collected: 01/27/2012 12:09

Sample wt/vol: 0.5(mL) | Date Analyzed: 02/02/2012 19:20

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-5 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 50111 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
107-21-1	Ethylene glycol	ND		10	0.76
112-27-6	Triethylene Glycol	ND		10	1.6
111-46-6	Diethylene glycol	0.57	J	10	0.51
109-86-4	2-Methoxyethanol	ND		10	0.76
110-80-5	2-Ethoxyethanol	ND		10	0.94

CAS NO.	SURROGATE	%REC	Q	LIMITS
110-63-4	1,4-Butanediol	99		66-130

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-15570-1

SDG No.:

Client Sample ID: HW24-P | Lab Sample ID: 480-15570-20

Matrix: Water | Lab File ID: PE08257.d

Analysis Method: 8015B | Date Collected: 01/27/2012 13:18

Sample wt/vol: 0.5(mL) | Date Analyzed: 02/02/2012 19:37

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-5 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 50111 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
107-21-1	Ethylene glycol	ND		10	0.76
112-27-6	Triethylene Glycol	ND		10	1.6
111-46-6	Diethylene glycol	0.56	J	10	0.51
109-86-4	2-Methoxyethanol	ND		10	0.76
110-80-5	2-Ethoxyethanol	ND		10	0.94

CAS NO.	SURROGATE	%REC	Q	LIMITS
110-63-4	1,4-Butanediol	101		66-130

Appendix B
Support Documentation

GC VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Buffalo Job No.: 480-15570-1

SDG No.:

Instrument ID: PE-01 Start Date: 02/01/2012 10:57

Analysis Batch Number: 49964 End Date: 02/01/2012 19:02

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		02/01/2012 10:57	1		ZB-5 0.25(mm)
STD 480-49964/5 IC		02/01/2012 11:15	1	PE08205.d	ZB-5 0.25(mm)
STD 480-49964/6 IC		02/01/2012 11:32	1	PE08206.d	ZB-5 0.25(mm)
STD 480-49964/7 IC		02/01/2012 11:49	1	PE08207.d	ZB-5 0.25(mm)
STD 480-49964/8 IC		02/01/2012 12:06	1	PE08208.d	ZB-5 0.25(mm)
ICV 480-49964/9		02/01/2012 12:24	1		ZB-5 0.25(mm)
ZZZZZ		02/01/2012 13:43	1		ZB-5 0.25(mm)
ZZZZZ		02/01/2012 14:11	1		ZB-5 0.25(mm)
ICV 480-49964/12		02/01/2012 14:48	1		ZB-5 0.25(mm)
CCV 480-49964/13		02/01/2012 15:52	1		ZB-5 0.25(mm)
ZZZZZ		02/01/2012 16:09	1		ZB-5 0.25(mm)
ZZZZZ		02/01/2012 16:26	1		ZB-5 0.25(mm)
ZZZZZ		02/01/2012 16:44	1		ZB-5 0.25(mm)
ZZZZZ		02/01/2012 17:01	1		ZB-5 0.25(mm)
MDLV 480-49832/5-A		02/01/2012 17:18	1		ZB-5 0.25(mm)
MDLV 480-49832/6-A		02/01/2012 17:36	1		ZB-5 0.25(mm)
ZZZZZ		02/01/2012 17:53	50		ZB-5 0.25(mm)
CCV 480-49964/24		02/01/2012 19:02	1		ZB-5 0.25(mm)

FORM VI
GC VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Buffalo Job No.: 480-15570-1 Analy Batch No.: 49964

SDG No.:

Instrument ID: PE-01 GC Column: ZB-5 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/01/2012 10:57 Calibration End Date: 02/01/2012 12:06 Calibration ID: 5852

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD 480-49964/5	PE08205.d
Level 2	STD 480-49964/6	PE08206.d
Level 3	STD 480-49964/7	PE08207.d
Level 4	STD 480-49964/8	PE08208.d

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4		B	M1	M2								
2-Methoxyethanol	563452	596737	595761	513714	Ave		571859.509				6.2		20.0			
2-Ethoxyethanol	751570	792686	787469	694526	Ave		760510.780				5.3		20.0			
Propylene glycol	617951	671784	682739	601502	Ave		643217.933				5.4		20.0			
Ethylene glycol	459250	498692	513964	454783	Ave		480568.287				5.3		20.0			
Diethylene glycol	548106	538716	560304	500903	Ave		540870.511				4.4		20.0			
Triethylene Glycol	362706	305218	329041	307007	Ave		350933.990				17.0		20.0			
1,4-Butanediol	913252	977122	967058	853325	Ave		917742.130				5.9		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Buffalo Job No.: 480-15570-1 Analy Batch No.: 49964

SDG No.:

Instrument ID: PE-01 GC Column: ZB-5 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/01/2012 10:57 Calibration End Date: 02/01/2012 12:06 Calibration ID: 5852

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD 480-49964/5	PE08205.d
Level 2	STD 480-49964/6	PE08206.d
Level 3	STD 480-49964/7	PE08207.d
Level 4	STD 480-49964/8	PE08208.d

ANALYTE	CURVE TYPE	RESPONSE				CONCENTRATION (NG/UL)			
		LVL 1	LVL 2	LVL 3	LVL 4	LVL 1	LVL 2	LVL 3	LVL 4
2-Methoxyethanol	Ave	5634515	11934735	23830431	25685716	10.0	20.0	40.0	50.0
2-Ethoxyethanol	Ave	7515699	15853713	31498762	34726285	10.0	20.0	40.0	50.0
Propylene glycol	Ave	6179509	13435683	27309567	30075112	10.0	20.0	40.0	50.0
Ethylene glycol	Ave	4592495	9973849	20558557	22739168	10.0	20.0	40.0	50.0
Diethylene glycol	Ave	5481057	10774329	22412169	25045139	10.0	20.0	40.0	50.0
Triethylene Glycol	Ave	3627055	6104360	13161638	15350365	10.0	20.0	40.0	50.0
1,4-Butanediol	Ave	36530103	48856122	58023475	68266023	40.0	50.0	60.0	80.0

Curve Type Legend:
Ave = Average

GC VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Buffalo Job No.: 480-15570-1

SDG No.:

Instrument ID: PE-01 Start Date: 02/02/2012 07:53

Analysis Batch Number: 50111 End Date: 02/02/2012 20:29

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 480-50111/2		02/02/2012 07:53	1	PE08226.d	ZB-5 0.25(mm)
MB 480-50118/1-A		02/02/2012 08:46	1	PE08227.d	ZB-5 0.25(mm)
LCS 480-50118/2-A		02/02/2012 10:25	1	PE08228.d	ZB-5 0.25(mm)
480-15570-1	HW02	02/02/2012 10:42	1	PE08229.d	ZB-5 0.25(mm)
480-15570-2	EB01	02/02/2012 11:00	1	PE08230.d	ZB-5 0.25(mm)
480-15570-3	FB02	02/02/2012 11:17	1	PE08231.d	ZB-5 0.25(mm)
CCV 480-50111/8		02/02/2012 11:34	1	PE08232.d	ZB-5 0.25(mm)
480-15570-4	FB03	02/02/2012 12:08	1	PE08233.d	ZB-5 0.25(mm)
480-15570-5	FB04	02/02/2012 12:25	1	PE08234.d	ZB-5 0.25(mm)
480-15570-6	FB05	02/02/2012 12:43	1	PE08235.d	ZB-5 0.25(mm)
480-15570-7	FB06	02/02/2012 13:00	1	PE08236.d	ZB-5 0.25(mm)
480-15570-8	HW01	02/02/2012 13:17	1	PE08237.d	ZB-5 0.25(mm)
480-15570-9	HW02Z	02/02/2012 13:35	1	PE08238.d	ZB-5 0.25(mm)
480-15570-10	HW04	02/02/2012 13:52	1	PE08239.d	ZB-5 0.25(mm)
480-15570-1 MS	HW02 MS	02/02/2012 14:09	1	PE08240.d	ZB-5 0.25(mm)
480-15570-1 MSD	HW02 MSD	02/02/2012 14:26	1	PE08241.d	ZB-5 0.25(mm)
CCV 480-50111/18		02/02/2012 14:44	1	PE08242.d	ZB-5 0.25(mm)
ZZZZZ		02/02/2012 15:35	1		ZB-5 0.25(mm)
MB 480-50122/1-A		02/02/2012 16:10	1	PE08245.d	ZB-5 0.25(mm)
LCS 480-50122/2-A		02/02/2012 16:27	1	PE08246.d	ZB-5 0.25(mm)
480-15570-11	HW05	02/02/2012 16:44	1	PE08247.d	ZB-5 0.25(mm)
480-15570-12	HW06	02/02/2012 17:02	1	PE08248.d	ZB-5 0.25(mm)
CCV 480-50111/25		02/02/2012 17:19	1	PE08249.d	ZB-5 0.25(mm)
480-15570-13	HW08A	02/02/2012 17:36	1	PE08250.d	ZB-5 0.25(mm)
480-15570-14	HW12	02/02/2012 17:53	1	PE08251.d	ZB-5 0.25(mm)
480-15570-15	HW13	02/02/2012 18:11	1	PE08252.d	ZB-5 0.25(mm)
480-15570-16	HW14	02/02/2012 18:28	1	PE08253.d	ZB-5 0.25(mm)
480-15570-17	HW14-P	02/02/2012 18:45	1	PE08254.d	ZB-5 0.25(mm)
480-15570-18	HW17	02/02/2012 19:03	1	PE08255.d	ZB-5 0.25(mm)
480-15570-19	HW24	02/02/2012 19:20	1	PE08256.d	ZB-5 0.25(mm)
480-15570-20	HW24-P	02/02/2012 19:37	1	PE08257.d	ZB-5 0.25(mm)
480-15570-11 MS	HW05 MS	02/02/2012 19:54	1	PE08258.d	ZB-5 0.25(mm)
480-15570-11 MSD	HW05 MSD	02/02/2012 20:12	1	PE08259.d	ZB-5 0.25(mm)
CCV 480-50111/36		02/02/2012 20:29	1	PE08260.d	ZB-5 0.25(mm)

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-15570-1

SDG No.:

Lab Sample ID: CCV 480-50111/2 Calibration Date: 02/02/2012 07:53

Instrument ID: PE-01 Calib Start Date: 02/01/2012 10:57

GC Column: ZB-5 ID: 0.25(mm) Calib End Date: 02/01/2012 12:06

Lab File ID: PE08226.d Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Methoxyethanol	Ave	571860	580610		20.3	20.0	1.5	20.0
2-Ethoxyethanol	Ave	760511	771229		20.3	20.0	1.4	20.0
Propylene glycol	Ave	643218	642094		20.0	20.0	-0.2	20.0
Ethylene glycol	Ave	480568	476585		19.8	20.0	-0.8	20.0
Diethylene glycol	Ave	540871	517064		19.1	20.0	-4.4	20.0
Triethylene Glycol	Ave	350934	385273		22.0	20.0	9.8	20.0
1,4-Butanediol	Ave	917742	941083		51.3	50.0	2.5	20.0

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-15570-1

SDG No.:

Lab Sample ID: CCV 480-50111/8 Calibration Date: 02/02/2012 11:34

Instrument ID: PE-01 Calib Start Date: 02/01/2012 10:57

GC Column: ZB-5 ID: 0.25(mm) Calib End Date: 02/01/2012 12:06

Lab File ID: PE08232.d Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Methoxyethanol	Ave	571860	550104		19.2	20.0	-3.8	20.0
2-Ethoxyethanol	Ave	760511	734949		19.3	20.0	-3.4	20.0
Propylene glycol	Ave	643218	613890		19.1	20.0	-4.6	20.0
Ethylene glycol	Ave	480568	454437		18.9	20.0	-5.4	20.0
Diethylene glycol	Ave	540871	501207		18.5	20.0	-7.3	20.0
Triethylene Glycol	Ave	350934	302082		17.2	20.0	-13.9	20.0
1,4-Butanediol	Ave	917742	897006		48.9	50.0	-2.3	20.0

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-15570-1

SDG No.:

Lab Sample ID: CCV 480-50111/18 Calibration Date: 02/02/2012 14:44

Instrument ID: PE-01 Calib Start Date: 02/01/2012 10:57

GC Column: ZB-5 ID: 0.25(mm) Calib End Date: 02/01/2012 12:06

Lab File ID: PE08242.d Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Methoxyethanol	Ave	571860	553176		19.3	20.0	-3.3	20.0
2-Ethoxyethanol	Ave	760511	739166		19.4	20.0	-2.8	20.0
Propylene glycol	Ave	643218	614796		19.1	20.0	-4.4	20.0
Ethylene glycol	Ave	480568	458121		19.1	20.0	-4.7	20.0
Diethylene glycol	Ave	540871	508707		18.8	20.0	-5.9	20.0
Triethylene Glycol	Ave	350934	312423		17.8	20.0	-11.0	20.0
1,4-Butanediol	Ave	917742	900289		49.0	50.0	-1.9	20.0

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-15570-1

SDG No.:

Lab Sample ID: CCV 480-50111/25 Calibration Date: 02/02/2012 17:19

Instrument ID: PE-01 Calib Start Date: 02/01/2012 10:57

GC Column: ZB-5 ID: 0.25(mm) Calib End Date: 02/01/2012 12:06

Lab File ID: PE08249.d Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Methoxyethanol	Ave	571860	682915		23.9	20.0	19.4	20.0
2-Ethoxyethanol	Ave	760511	893401		23.5	20.0	17.5	20.0
Propylene glycol	Ave	643218	767609		23.9	20.0	19.3	20.0
Ethylene glycol	Ave	480568	574719		23.9	20.0	19.6	20.0
Diethylene glycol	Ave	540871	630354		23.3	20.0	16.5	20.0
Triethylene Glycol	Ave	350934	368811		21.0	20.0	5.1	20.0
1,4-Butanediol	Ave	917742	945545		51.5	50.0	3.0	20.0

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-15570-1

SDG No.:

Lab Sample ID: CCV 480-50111/36 Calibration Date: 02/02/2012 20:29

Instrument ID: PE-01 Calib Start Date: 02/01/2012 10:57

GC Column: ZB-5 ID: 0.25(mm) Calib End Date: 02/01/2012 12:06

Lab File ID: PE08260.d Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Methoxyethanol	Ave	571860	752335		26.3	20.0	31.6*	20.0
2-Ethoxyethanol	Ave	760511	1011859		26.6	20.0	33.0*	20.0
Propylene glycol	Ave	643218	854527		26.6	20.0	32.9*	20.0
Ethylene glycol	Ave	480568	642211		26.7	20.0	33.6*	20.0
Diethylene glycol	Ave	540871	702019		26.0	20.0	29.8*	20.0
Triethylene Glycol	Ave	350934	425562		24.3	20.0	21.3*	20.0
1,4-Butanediol	Ave	917742	1050394		57.2	50.0	14.5	20.0

FORM III
GC VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-15570-1

SDG No.:

Matrix: Water Level: Low Lab File ID: PE08228.d

Lab ID: LCS 480-50118/2-A Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
Ethylene glycol	20.0	16.2	81	62-148	
Triethylene Glycol	20.0	16.0	80	10-169	
Diethylene glycol	20.0	15.6	78	61-150	
2-Methoxyethanol	20.0	18.4	92	75-121	
2-Ethoxyethanol	20.0	18.6	93	72-122	

Column to be used to flag recovery and RPD values

FORM III 8015B

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-15570-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 480-50118/2-A

Matrix: Water Lab File ID: PE08228.d

Analysis Method: 8015B Date Collected:

Sample wt/vol: 0.5(mL) Date Analyzed: 02/02/2012 10:25

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-5 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 50111 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
107-21-1	Ethylene glycol	16.2		10	0.76
112-27-6	Triethylene Glycol	16.0		10	1.6
111-46-6	Diethylene glycol	15.6		10	0.51
109-86-4	2-Methoxyethanol	18.4		10	0.76
110-80-5	2-Ethoxyethanol	18.6		10	0.94

CAS NO.	SURROGATE	%REC	Q	LIMITS
110-63-4	1,4-Butanediol	93		66-130

FORM III
GC VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-15570-1

SDG No.:

Matrix: Water Level: Low Lab File ID: PE08246.d

Lab ID: LCS 480-50122/2-A Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
Ethylene glycol	20.0	18.0	90	62-148	
Triethylene Glycol	20.0	14.8	74	10-169	
Diethylene glycol	20.0	17.8	89	61-150	
2-Methoxyethanol	20.0	18.9	95	75-121	
2-Ethoxyethanol	20.0	18.7	94	72-122	

Column to be used to flag recovery and RPD values

FORM III 8015B

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-15570-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 480-50122/2-A

Matrix: Water Lab File ID: PE08246.d

Analysis Method: 8015B Date Collected:

Sample wt/vol: 0.5(mL) Date Analyzed: 02/02/2012 16:27

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-5 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 50111 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
107-21-1	Ethylene glycol	18.0		10	0.76
112-27-6	Triethylene Glycol	14.8		10	1.6
111-46-6	Diethylene glycol	17.8		10	0.51
109-86-4	2-Methoxyethanol	18.9		10	0.76
110-80-5	2-Ethoxyethanol	18.7		10	0.94

CAS NO.	SURROGATE	%REC	Q	LIMITS
110-63-4	1,4-Butanediol	97		66-130

FORM III
GC VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-15570-1

SDG No.:

Matrix: Water Level: Low Lab File ID: PE08240.d

Lab ID: 480-15570-1 MS Client ID: HW02 MS

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	MS CONCENTRATION (mg/L)	MS % REC	QC LIMITS REC	#
Ethylene glycol	20.0	ND	18.1	90	50-150	
Triethylene Glycol	20.0	ND	15.3	76	50-150	
Diethylene glycol	20.0	0.64 J	17.8	86	50-150	
2-Methoxyethanol	20.0	ND	18.6	93	50-150	
2-Ethoxyethanol	20.0	ND	18.7	94	50-150	

Column to be used to flag recovery and RPD values

FORM III 8015B

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-15570-1

SDG No.:

Client Sample ID: HW02 MS Lab Sample ID: 480-15570-1 MS

Matrix: Water Lab File ID: PE08240.d

Analysis Method: 8015B Date Collected: 01/25/2012 12:58

Sample wt/vol: 0.5(mL) Date Analyzed: 02/02/2012 14:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-5 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 50111 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
107-21-1	Ethylene glycol	18.1		10	0.76
112-27-6	Triethylene Glycol	15.3		10	1.6
111-46-6	Diethylene glycol	17.8		10	0.51
109-86-4	2-Methoxyethanol	18.6		10	0.76
110-80-5	2-Ethoxyethanol	18.7		10	0.94

CAS NO.	SURROGATE	%REC	Q	LIMITS
110-63-4	1,4-Butanediol	99		66-130

FORM III
GC VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-15570-1

SDG No.:

Matrix: Water Level: Low Lab File ID: PE08241.d

Lab ID: 480-15570-1 MSD Client ID: HW02 MSD

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENTRATION (mg/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Ethylene glycol	20.0	18.1	91	0	50	50-150	
Triethylene Glycol	20.0	17.7	88	14	50	50-150	
Diethylene glycol	20.0	18.1	87	2	50	50-150	
2-Methoxyethanol	20.0	18.4	92	1	50	50-150	
2-Ethoxyethanol	20.0	18.5	93	1	50	50-150	

Column to be used to flag recovery and RPD values

FORM III 8015B

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-15570-1

SDG No.:

Client Sample ID: HW02 MSD Lab Sample ID: 480-15570-1 MSD

Matrix: Water Lab File ID: PE08241.d

Analysis Method: 8015B Date Collected: 01/25/2012 12:58

Sample wt/vol: 0.5(mL) Date Analyzed: 02/02/2012 14:26

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-5 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 50111 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
107-21-1	Ethylene glycol	18.1		10	0.76
112-27-6	Triethylene Glycol	17.7		10	1.6
111-46-6	Diethylene glycol	18.1		10	0.51
109-86-4	2-Methoxyethanol	18.4		10	0.76
110-80-5	2-Ethoxyethanol	18.5		10	0.94

CAS NO.	SURROGATE	%REC	Q	LIMITS
110-63-4	1,4-Butanediol	101		66-130

FORM III
GC VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-15570-1

SDG No.:

Matrix: Water Level: Low Lab File ID: PE08258.d

Lab ID: 480-15570-11 MS Client ID: HW05 MS

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	MS CONCENTRATION (mg/L)	MS % REC	QC LIMITS REC	#
Ethylene glycol	20.0	ND	18.3	92	50-150	
Triethylene Glycol	20.0	2.2 J	15.6	67	50-150	
Diethylene glycol	20.0	0.68 J	18.6	90	50-150	
2-Methoxyethanol	20.0	ND	19.0	95	50-150	
2-Ethoxyethanol	20.0	ND	19.2	96	50-150	

Column to be used to flag recovery and RPD values

FORM III 8015B

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-15570-1

SDG No.:

Client Sample ID: HW05 MS | Lab Sample ID: 480-15570-11 MS

Matrix: Water | Lab File ID: PE08258.d

Analysis Method: 8015B | Date Collected: 01/26/2012 11:35

Sample wt/vol: 0.5(mL) | Date Analyzed: 02/02/2012 19:54

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-5 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 50111 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
107-21-1	Ethylene glycol	18.3		10	0.76
112-27-6	Triethylene Glycol	15.6		10	1.6
111-46-6	Diethylene glycol	18.6		10	0.51
109-86-4	2-Methoxyethanol	19.0		10	0.76
110-80-5	2-Ethoxyethanol	19.2		10	0.94

CAS NO.	SURROGATE	%REC	Q	LIMITS
110-63-4	1,4-Butanediol	103		66-130

FORM III
GC VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-15570-1

SDG No.:

Matrix: Water Level: Low Lab File ID: PE08259.d

Lab ID: 480-15570-11 MSD Client ID: HW05 MSD

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENTRATION (mg/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Ethylene glycol	20.0	20.2	101	10	50	50-150	
Triethylene Glycol	20.0	19.0	84	19	50	50-150	
Diethylene glycol	20.0	21.4	104	14	50	50-150	
2-Methoxyethanol	20.0	20.6	103	8	50	50-150	
2-Ethoxyethanol	20.0	21.4	107	11	50	50-150	

Column to be used to flag recovery and RPD values

FORM III 8015B

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-15570-1

SDG No.:

Client Sample ID: HW05 MSD | Lab Sample ID: 480-15570-11 MSD

Matrix: Water | Lab File ID: PE08259.d

Analysis Method: 8015B | Date Collected: 01/26/2012 11:35

Sample wt/vol: 0.5(mL) | Date Analyzed: 02/02/2012 20:12

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-5 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 50111 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
107-21-1	Ethylene glycol	20.2		10	0.76
112-27-6	Triethylene Glycol	19.0		10	1.6
111-46-6	Diethylene glycol	21.4		10	0.51
109-86-4	2-Methoxyethanol	20.6		10	0.76
110-80-5	2-Ethoxyethanol	21.4		10	0.94

CAS NO.	SURROGATE	%REC	Q	LIMITS
110-63-4	1,4-Butanediol	109		66-130

FORM II
GC VOA SURROGATE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-15570-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): ZB-5 ID: 0.25 (mm)

Client Sample ID	Lab Sample ID	14BD1 #
HW02	480-15570-1	106
EB01	480-15570-2	106
FB02	480-15570-3	103
FB03	480-15570-4	104
FB04	480-15570-5	106
FB05	480-15570-6	108
FB06	480-15570-7	105
HW01	480-15570-8	103
HW02Z	480-15570-9	100
HW04	480-15570-10	99
HW05	480-15570-11	102
HW06	480-15570-12	105
HW08A	480-15570-13	101
HW12	480-15570-14	100
HW13	480-15570-15	100
HW14	480-15570-16	103
HW14-P	480-15570-17	102
HW17	480-15570-18	102
HW24	480-15570-19	99
HW24-P	480-15570-20	101
	MB 480-50118/1-A	101
	MB 480-50122/1-A	92
	LCS 480-50118/2-A	93
	LCS 480-50122/2-A	97
HW02 MS	480-15570-1 MS	99
HW05 MS	480-15570-11 MS	103
HW02 MSD	480-15570-1 MSD	101
HW05 MSD	480-15570-11 MSD	109

14BD = 1,4-Butanediol

QC LIMITS
66-130

Column to be used to flag recovery values

FORM II 8015B

GC VOA BATCH WORKSHEET

Lab Name: TestAmerica Buffalo Job No.: 480-15570-1

SDG No.:

Batch Number: 50118 Batch Start Date: 02/02/12 08:45 Batch Analyst: Dosier, Christina

Batch Method: 8015 Prep Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	GLY_CCV_1000 00013	GLY_SURR1000 00015		
MB 480-50118/1		8015 Prep, 8015B		0.5 mL	1 mL		50 uL		
LCS 480-50118/2		8015 Prep, 8015B		0.5 mL	1 mL	10 uL	50 uL		
480-15570-B-1	HW02	8015 Prep, 8015B	T	0.5 mL	1 mL		50 uL		
480-15570-B-1 MS	HW02	8015 Prep, 8015B	T	0.5 mL	1 mL	10 uL	50 uL		
480-15570-B-1 MSD	HW02	8015 Prep, 8015B	T	0.5 mL	1 mL	10 uL	50 uL		
480-15570-A-2	EB01	8015 Prep, 8015B	T	0.5 mL	1 mL		50 uL		
480-15570-A-3	FB02	8015 Prep, 8015B	T	0.5 mL	1 mL		50 uL		
480-15570-A-4	FB03	8015 Prep, 8015B	T	0.5 mL	1 mL		50 uL		
480-15570-B-5	FB04	8015 Prep, 8015B	T	0.5 mL	1 mL		50 uL		
480-15570-B-6	FB05	8015 Prep, 8015B	T	0.5 mL	1 mL		50 uL		
480-15570-A-7	FB06	8015 Prep, 8015B	T	0.5 mL	1 mL		50 uL		
480-15570-A-8	HW01	8015 Prep, 8015B	T	0.5 mL	1 mL		50 uL		
480-15570-B-9	HW02Z	8015 Prep, 8015B	T	0.5 mL	1 mL		50 uL		
480-15570-A-10	HW04	8015 Prep, 8015B	T	0.5 mL	1 mL		50 uL		

Batch Notes	
Methanol Lot Number	DE695

Basis	Basis Description
T	Total/NA

GC VOA BATCH WORKSHEET

Lab Name: TestAmerica Buffalo Job No.: 480-15570-1

SDG No.:

Batch Number: 50122 Batch Start Date: 02/02/12 09:09 Batch Analyst: Dosier, Christina

Batch Method: 8015 Prep Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	GLY_CCV_1000 00013	GLY_SURR1000 00015		
MB 480-50122/1		8015 Prep, 8015B		0.5 mL	1 mL		50 uL		
LCS 480-50122/2		8015 Prep, 8015B		0.5 mL	1 mL	10 uL	50 uL		
480-15570-B-11	HW05	8015 Prep, 8015B	T	0.5 mL	1 mL		50 uL		
480-15570-B-11 MS	HW05	8015 Prep, 8015B	T	0.5 mL	1 mL	10 uL	50 uL		
480-15570-B-11 MSD	HW05	8015 Prep, 8015B	T	0.5 mL	1 mL	10 uL	50 uL		
480-15570-B-12	HW06	8015 Prep, 8015B	T	0.5 mL	1 mL		50 uL		
480-15570-A-13	HW08A	8015 Prep, 8015B	T	0.5 mL	1 mL		50 uL		
480-15570-A-14	HW12	8015 Prep, 8015B	T	0.5 mL	1 mL		50 uL		
480-15570-B-15	HW13	8015 Prep, 8015B	T	0.5 mL	1 mL		50 uL		
480-15570-B-16	HW14	8015 Prep, 8015B	T	0.5 mL	1 mL		50 uL		
480-15570-B-17	HW14-P	8015 Prep, 8015B	T	0.5 mL	1 mL		50 uL		
480-15570-A-18	HW17	8015 Prep, 8015B	T	0.5 mL	1 mL		50 uL		
480-15570-B-19	HW24	8015 Prep, 8015B	T	0.5 mL	1 mL		50 uL		
480-15570-A-20	HW24-P	8015 Prep, 8015B	T	0.5 mL	1 mL		50 uL		

Batch Notes	
Methanol Lot Number	DE695

Basis	Basis Description
T	Total/NA

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-15570-1

SDG No.:

Lab Sample ID: MB 480-50118/1-A

Matrix: Water Date Extracted: 02/02/2012 08:45

Lab File ID:(1) PE08227.d Lab File ID:(2)

Date Analyzed:(1) 02/02/2012 08:46 Date Analyzed:(2)

Instrument ID:(1) PE-01 Instrument ID:(2)

GC Column:(1) ZB-5 ID: 0.25(mm) GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 480-50118/2-A	02/02/2012 10:25	
HW02	480-15570-1	02/02/2012 10:42	
EB01	480-15570-2	02/02/2012 11:00	
FB02	480-15570-3	02/02/2012 11:17	
FB03	480-15570-4	02/02/2012 12:08	
FB04	480-15570-5	02/02/2012 12:25	
FB05	480-15570-6	02/02/2012 12:43	
FB06	480-15570-7	02/02/2012 13:00	
HW01	480-15570-8	02/02/2012 13:17	
HW02Z	480-15570-9	02/02/2012 13:35	
HW04	480-15570-10	02/02/2012 13:52	
HW02 MS	480-15570-1 MS	02/02/2012 14:09	
HW02 MSD	480-15570-1 MSD	02/02/2012 14:26	

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-15570-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-50118/1-A

Matrix: Water Lab File ID: PE08227.d

Analysis Method: 8015B Date Collected:

Sample wt/vol: 0.5(mL) Date Analyzed: 02/02/2012 08:46

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-5 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 50111 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
107-21-1	Ethylene glycol	ND		10	0.76
112-27-6	Triethylene Glycol	ND		10	1.6
111-46-6	Diethylene glycol	ND		10	0.51
109-86-4	2-Methoxyethanol	ND		10	0.76
110-80-5	2-Ethoxyethanol	ND		10	0.94

CAS NO.	SURROGATE	%REC	Q	LIMITS
110-63-4	1,4-Butanediol	101		66-130

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-15570-1

SDG No.:

Lab Sample ID: MB 480-50122/1-A

Matrix: Water Date Extracted: 02/02/2012 09:09

Lab File ID:(1) PE08245.d Lab File ID:(2)

Date Analyzed:(1) 02/02/2012 16:10 Date Analyzed:(2)

Instrument ID:(1) PE-01 Instrument ID:(2)

GC Column:(1) ZB-5 ID: 0.25(mm) GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 480-50122/2-A	02/02/2012 16:27	
HW05	480-15570-11	02/02/2012 16:44	
HW06	480-15570-12	02/02/2012 17:02	
HW08A	480-15570-13	02/02/2012 17:36	
HW12	480-15570-14	02/02/2012 17:53	
HW13	480-15570-15	02/02/2012 18:11	
HW14	480-15570-16	02/02/2012 18:28	
HW14-P	480-15570-17	02/02/2012 18:45	
HW17	480-15570-18	02/02/2012 19:03	
HW24	480-15570-19	02/02/2012 19:20	
HW24-P	480-15570-20	02/02/2012 19:37	
HW05 MS	480-15570-11 MS	02/02/2012 19:54	
HW05 MSD	480-15570-11 MSD	02/02/2012 20:12	

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-15570-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 480-50122/1-A

Matrix: Water | Lab File ID: PE08245.d

Analysis Method: 8015B | Date Collected:

Sample wt/vol: 0.5(mL) | Date Analyzed: 02/02/2012 16:10

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-5 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 50111 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
107-21-1	Ethylene glycol	ND		10	0.76
112-27-6	Triethylene Glycol	ND		10	1.6
111-46-6	Diethylene glycol	ND		10	0.51
109-86-4	2-Methoxyethanol	ND		10	0.76
110-80-5	2-Ethoxyethanol	ND		10	0.94

CAS NO.	SURROGATE	%REC	Q	LIMITS
110-63-4	1,4-Butanediol	92		66-130